CLEAN UNITS

The "Clean Unit test" is a new type of applicability test. An emissions unit qualifies as a Clean Unit, and qualifies to use the Clean Unit applicability test, if it has gone through major NSR permitting review and is complying with BACT or LAER. When a source undergoes major NSR review and installs BACT or LAER, it may make changes to a Clean Unit without triggering an additional major NSR review. The Clean Unit test does not exclude consideration of physical changes or changes in the method of operation of Clean Units from major NSR; rather, it changes the way emissions increases are calculated for these changes.

Conversely, if an emissions unit has not gone through a major NSR permitting review, it does not automatically qualify for Clean Unit status. These emissions units must first go through a SIP-approved permitting process that includes a process for determining whether the emissions unit meets the criteria to be designated as a Clean Unit. This process must include public notice and opportunity for public comment. Emissions units that have not been through major NSR may still qualify for Clean Unit status if they demonstrate that the emissions control level is comparable to BACT or LAER.

Obtaining Clean Unit status.

To obtain Clean Unit status and qualify for the Clean Unit applicability test using a SIP-approved permitting process, the source must pass a two-part test:

- the air pollution control technology (which includes pollution prevention or work practices) must be comparable to BACT or LAER; and
- the allowable emissions will not cause or contribute to a NAAQS or PSD increment violation, or have an adverse impact an AQRV (such as visibility) that has been identified for a federal Class I area by an FLM and for which information is available to the general public.

There are two ways that a source can show that the air pollution control technology is comparable to BACT or LAER:

- by comparing the emissions unit's control level to BACT or LAER determinations for similar sources; or
- by making a case-by-case demonstration that the emissions control is "substantially as effective" as BACT or LAER.

If the emissions unit automatically qualifies as a Clean Unit because it has been through major NSR permitting, the Clean Unit applicability test may be used for up to 10 years. Sources may apply for Clean Unit status for control technologies that had been installed in the past if they go through a SIP-approved permitting program that authorizes Clean Units and the unit qualifies as a Clean Unit. The Clean Unit effective period for these emissions units is good for a period of 10 years.

Units may requalify for Clean Unit status. Upon expiration of Clean Unit status, the Clean Unit applicability test no longer applies to changes at the emissions unit.

Attainment and Nonattainment Areas

Clean Unit status is available regardless of whether the source is located in an attainment area or in a nonattainment area.

For sources that are located in nonattainment areas, and have undergone major NSR permitting while the area was nonattainment, or that qualified for Clean Unit status showing they are comparable to LAER, the permitted emissions level for the Clean Unit must have been offset. Emissions reductions resulting from installation of the control technology that is the basis of an emissions unit's status as a Clean Unit may not be used as offsets. However, emissions reductions below the level that qualified the unit as a Clean Unit may be used as offsets if they are surplus, quantifiable, permanent, and federally enforceable.

For emissions units that are designated as Clean Units and that are located in nonattainment areas, RACT and any other requirements for nonattainment area sources under the SIP still apply. The only exception is that the specific major NSR requirements related to calculating emissions increases from a physical change or change in the method of operation for all other existing sources are not applicable to Clean Units, because the Clean Units are subject to an alternative major NSR applicability requirement for calculating emissions increases when changes are made.

As discussed elsewhere, the "substantially as effective" test for sources in nonattainment areas must consider only LAER determinations, except that emissions units in nonattainment areas that went through major NSR permitting while the area was designated an attainment area for that regulated NSR pollutant, and that received a permit based on a qualifying air pollution control technology, automatically qualify as Clean Units. If an emissions unit received Clean Unit status while the unit was located in an attainment area and the area's attainment status subsequently changes to nonattainment, the unit retains Clean Unit status until expiration. However, to requalify as a Clean Unit, the unit must meet the requirements that apply in nonattainment areas.

Qualifying as a Clean Unit

Any emissions unit permitted through major NSR automatically qualifies as a Clean Unit, provided the BACT or LAER determination results in some degree of emissions control. These units already meet both the control technology and air quality criteria of the CAA and the NSR regulations. Although emissions units that have been through major NSR automatically qualify for Clean Unit status, there are specific procedures for establishing and maintaining Clean Unit status.

Emissions units that have not gone through a major NSR permitting action that resulted in a requirement to comply with BACT or LAER may qualify for Clean Unit status if they are permitted under a SIP-approved permitting program that provides for public notice and comment. A two-part test must be met to obtain Clean Unit status: the air pollution control technology must be comparable to BACT or LAER; and the allowable emissions will not cause or contribute to a NAAQS or PSD increment violation, or adversely affect an AQRV that has been identified for a federal Class I area by an FLM.

There are two options for comparing the air pollution control technology to BACT or LAER:

- compare the emissions unit's control level to BACT or LAER determinations for other similar sources in the RACT/BACT/LAER Clearinghouse (RBLC); or
- make a case-by-case demonstration that the emissions control is "substantially as effective" as BACT or LAER.

First option: In a nonattainment area, the control technology must be compared to the best-performing 5 similar sources in the RBLC for which LAER has been determined within the past 5 years. If the emission limitation is at least as stringent as any one of the 5 best-performing units, and the unit also passes the air quality test, then the department may presume that it qualifies as a Clean Unit. In an attainment area, the source must compare the control technology to all BACT and LAER decisions that have been entered into the RBLC in the past 5 years, and for which it is technically feasible to apply the BACT or LAER control. If the control technology achieves a level of control that is equal to or better than the average of these determinations, and the unit also passes the air quality test, then the department may presume that the unit qualifies as a Clean Unit.

After the demonstration has been submitted, the department will also consider other BACT or LAER determinations that are not included in the RBLC to determine whether the proposed emissions rate is comparable to BACT or LAER, and incorporate this information into its determination. The public will also have an opportunity to comment on the department's decision to designate an emissions unit as a Clean Unit. This ensures that the source meets an emissions level comparable to that of BACT or LAER, while providing them the flexibility to use controls best suited to its processes.

Second option: The first option is a streamlined way to identify Clean Units. Any unit that meets these qualifications will be presumed to be a Clean Unit. Conversely, the opposite is not true: the department will not presume that a unit that does not meet the test is not a Clean Unit. The quality and number of determinations in the RBLC vary by different types of sources. Therefore, there is a second option for determining whether a unit qualifies as a Clean Unit: if it does not meet the emission limitation determined from the RBLC analysis, or if there is insufficient information in the RBLC to conduct the analysis, then the source may show, on a case-by-case basis, that the unit will achieve a level of control that is "substantially as effective" as BACT or LAER. In an attainment area, the emissions unit must achieve a level of control that is substantially as effective as BACT. In a nonattainment area, the emissions unit must achieve a level of control that is substantially as effective as LAER. The department will determine whether a particular air pollution control technology is substantially as effective as the BACT or LAER technology for a specific source on a case-by-case basis.

Additionally, the source must demonstrate that the allowable emissions will not cause or contribute to a NAAQS or PSD increment violation, or have an adverse impact on an AQRV. If the emissions unit has already been permitted under minor NSR or another SIP-approved permitting program, the source may have already satisfied the second part of the test. If not, the source is required to show that the allowable emissions will

not cause or contribute to a NAAQS or PSD increment violation, or have an adverse impact on an AQRV. For areas that do not already attain the NAAQS, the source would have to show that the emissions for the unit have been previously offset.

Meeting an emission limitation without using a control technology.

In most cases, BACT or LAER will result in significant emissions decreases. It is possible that a BACT or LAER analysis will not result in the requirement of add-on controls. In some situations, the department may determine that the control technology that best represents BACT or LAER is a work practice, or a combination of work practices and add-on controls. As a result, a requirement to use work practices or a combination of add-on controls and work practices as an emissions control technology could qualify an emissions unit for Clean Unit status. In some circumstances, however, the outcome of the department's BACT or LAER determination may result in an emission limitation that the source will meet without using a control technology. Under such circumstances, a unit would not qualify as a Clean Unit. More specifically, the source is also required to make an investment to qualify initially as a Clean Unit. An investment includes any cost which would ordinarily qualify as a capital expense whether or not the source chooses to capitalize that cost. An investment also includes any cost incurred to change an emissions unit or process to implement a pollution prevention approach, including research expenses, or costs to retool or reformulate the emissions unit or process to accommodate an add-on control, pollution prevention approach, or work practice.

Major NSR requirements that apply to Clean Units.

Once an emissions unit qualifies as a Clean Unit, it is subject to an alternative major NSR applicability test for calculating emissions increases for subsequent changes. In the new rules, a major modification for emissions units that are not Clean Units occurs if both of the following result from the modification:

- a significant emissions increase following the physical or operational change; and
 - a significant net emissions increase from the major stationary source.

The major NSR applicability test for Clean Units is a different process. For Clean Units, the source must first determine whether a project requires a change to the emission limitations or work practice requirements in the permit which were established in conjunction with BACT, LAER, or Clean Unit determinations and any physical or operational characteristics that formed the basis for the determination. If it does, Clean Unit status is lost, and the project is subject to the applicability requirements as if the emissions unit were never a Clean Unit. If the project does not require a change to the emission limitations or work practice requirements in the permit which were established in conjunction with BACT, LAER, or Clean Unit determinations and any physical or operational characteristics that formed the basis for the determination, then Clean Unit status is maintained, and no emissions increase is deemed to occur for the purposes of major NSR. If Clean Unit status is lost, a unit may later requalify.

Clean Unit status for controls that have already been installed.

Emissions units that have been through major NSR permitting automatically qualify for Clean Unit status. This includes emissions units that went through major NSR before promulgation of the new rules. If an emissions unit automatically qualifies for Clean Unit status because it went through major NSR, its Clean Unit status is based on the BACT or LAER controls that went into service as a result of the major NSR review. That is, Clean Unit status is based on the BACT or LAER controls regardless of whether or not the actual process for designating Clean Unit status through title V occurs after the controls went into service. However, Clean Unit status, and the ability to use the applicability process for Clean Units, does not begin until the Clean Unit effective date.

For emissions units that have not been through major NSR, the department may allow Clean Unit status for emissions control that have already been installed and operated. However, the timeframe under which the department can make such determinations for Clean Unit status that is granted through a SIP-approved permitting process other than major NSR is limited. The department can only grant Clean Unit status for previously installed emissions controls if they were installed before the effective date of the program. If the emissions unit's control technology is installed on or after the date that provisions for the Clean Unit applicability test are effective, the source must apply for Clean Unit status at the time the control technology is installed. As for emissions units that went through major NSR review, Clean Unit status for emissions units permitted through SIP-approved programs other than major NSR does not begin until the Clean Unit effective date.

If a source is applying for retroactive Clean Unit status, the department may compare the emissions control level to the BACT or LAER level that would have applied at the time the source began construction of the emissions unit. However, such a comparison may be difficult because insufficient information exists on which to base a determination. If this is the case, then the source must demonstrate that the emissions controls are comparable to a BACT or LAER limit from a subsequent or current date.

Implementing Clean Unit status.

Effective date.

The exact effective date depends on the individual emissions unit. As a general rule, the effective date for Clean Unit status cannot be before the Clean Unit provision becomes effective in the state.

For emissions units that automatically qualified for their original Clean Unit status because they had been through major NSR review, and for units that requalified for Clean Unit status by going through major NSR review and implementing new control technology to meet BACT or LAER, the effective date is the date the emissions unit's air pollution control technology is placed into service, or 3 years after the issuance date of the major NSR permit, whichever is earlier. However, the effective date can be no sooner than the date that provisions for the Clean Unit applicability test are approved by the Administrator for incorporation into the SIP and become effective for the state in which the unit is located. That is, if the source had a major NSR permit and began

operating before the Clean Unit provision becomes effective in the state, the effective date is the date the state begins authorizing Clean Unit status. As noted earlier, if the emissions unit previously went through major NSR, it automatically qualifies as a Clean Unit. The original Clean Unit status would be based on the controls that were installed to meet major NSR. An additional investment at the time the original Clean Unit status becomes effective is not required.

For emissions units that requalify for Clean Unit status by going through major NSR using an existing control technology that continues to meet BACT or LAER, the effective date is the date the new major NSR permit is issued.

If a source obtains Clean Unit status using a SIP-approved permitting process other than major NSR, the Clean Unit effective date is the later of:

- the date that the state permit that designates the emissions unit as a Clean Unit is issued; and
- the date that the emissions unit's air pollution control measures went into service. That is, if the controls went into service before the issuance date of the state permit that designates the unit as a Clean Unit, the Clean Unit effective date is the date that the permit is issued.

As with units that have been through major NSR, additional investment is not required for the occasional cases where there is a retroactive designation. If the issuance date of the state permit that designates the emissions unit as a Clean Unit is before the date the controls went into service (as would likely be the case for a unit that is new or modified after the state begins to authorize Clean Unit status), then the effective date of Clean Unit status is the date the controls went into service.

Duration.

In most cases, the Clean Unit applicability test may be used for a period of 10 years. As a general principle, the Clean Unit expiration date can never be later than the date that is 10 years after the controls are brought into service.

For emissions units that automatically qualify for their original Clean Unit status because they have been through major NSR review, and for units that requalify for Clean Unit status by going through major NSR review and implementing new control technology to meet BACT or LAER, Clean Unit status expires 10 years after either the effective date or the date the equipment went into service, whichever is earlier. However, Clean Unit status expires sooner if, at any time, the owner fails to comply with Clean Unit requirements.

For emissions units that requalify for Clean Unit status by going through major NSR using an existing control technology that continues to meet BACT or LAER, Clean Unit status expires 10 years after the effective date. Clean Unit status expires sooner if the owner fails to maintain Clean Unit status.

The expiration date for Clean Units that have not been through major NSR depends on whether the owner or qualifies for Clean Unit status based on current BACT or LAER, or

on BACT or LAER at the time the control technology was installed. If the owner of a previously installed unit demonstrates that the emission limitation achieved by the emissions unit's control technology is comparable to the BACT or LAER requirements that applied at the time the control technology was installed, then Clean Unit status expires 10 years from the date that the control technology was installed. For all other emissions units (previously installed units that are demonstrated to be comparable to current BACT or LAER, new units, and units that requalify as Clean Units), Clean Unit status expires 10 years from the effective date of the Clean Unit status. As always, Clean Unit status expires any time Clean Unit requirements are not met.

When Clean Unit status expires, the unit is subject to the major NSR applicability test as if the unit is not a Clean Unit. The permitted emissions levels established for the Clean Unit do not expire.

Requalification.

A unit may requalify for Clean Unit status after the status has expired or has otherwise been lost. Once state-of-the-art emissions control has been installed, an additional major NSR review will generally not result in any additional emissions controls for some time after the original control technology determination is made. Also, the period for which any specific air pollution control technology (including pollution prevention or work practices) will continue to achieve the same level of control depends on many factors.

To requalify for Clean Unit status, a source would generally follow the same process used to first qualify for Clean Unit status. However, an additional investment test is not necessarily required to requalify for Clean Unit status for the same controls: unless the controls used to establish Clean Unit status are no longer BACT or LAER or comparable, there is no requirement for an investment to requalify.

A unit may requalify either by going through major NSR, or by going through the alternative Clean Unit Test:

- the air pollution control technology must be comparable to BACT or LAER; and
- the allowable emissions will not cause or contribute to a NAAQS or PSD increment violation, or adversely affect an AQRV.

Regardless of which process was used to establish Clean Unit status initially, a source may choose to requalify for Clean Unit status by going through major NSR or by going through the alternative two-part test.

Once the source has submitted an application to requalify for Clean Unit status, the department will make a determination concerning current BACT or LAER or a comparable control technology. When the requalifying emissions unit is located in a nonattainment area, the control determination must be LAER or comparable to LAER. If Clean Unit status was previously based on the BACT level of control while the source was located in an attainment area and the attainment area has become a nonattainment area, the Clean Unit status for requalification must be based on controls that are LAER or comparable to LAER.

The air quality analysis for Clean Unit requalification depends on whether the source chooses the major NSR path, or the comparable control path. The allowable emissions cannot cause or contribute to a NAAQS or PSD increment violation, or adversely affect an AQRV. If a source submits an application to requalify for Clean Unit status and the department determines that the existing controls do not meet the level of current BACT or LAER or comparable controls, the source must install new or upgraded controls to requalify. It must go through the control technology determination, air quality review, and public participation requirements of the Clean Unit requalification process.

Permit issues.

Permit terms and conditions.

Major NSR permits contain emission limitations based on BACT or LAER, other permit terms and conditions that the department identifies as representative of BACT or LAER (such as limits on hours of operation), and monitoring, recordkeeping and reporting requirements. If a source is qualifying for Clean Unit status through the major NSR review, the major NSR permit will have such terms and conditions.

Likewise, any permit under a SIP-approved permitting process other than major NSR that designates a Clean Unit must specify:

- if the source-specific allowable permit emission limitations, the exceedance of which, in combination with a significant net emissions increase, will trigger major NSR review;
- other permit terms and conditions that the department identifies as representative or comparable to BACT or LAER for the unit's control technology;
- any conditions used as the basis for the control technology determinations (such as hours of operation or limits on raw materials); and
- the monitoring, recordkeeping, and reporting requirements necessary to demonstrate that a "clean" level of emissions control is being achieved. Additional monitoring, recordkeeping, and reporting may be required to assure compliance under title V.

A permit establishing Clean Unit status also must contain a statement designating the emissions unit as a Clean Unit, as well as the Clean Unit effective date and expiration date.

Title V permits.

Clean Unit status and other permit terms and conditions must be incorporated into the major stationary source's title V permit. The title V permit must also contain the specific dates on which the Clean Unit status is effective and on which it expires. Because the specific Clean Unit effective and expiration dates may not be determined at the time that Clean Unit status is established, the initial title V permit action that incorporates Clean Unit status and other permit terms and conditions may need to state the Clean Unit effective and expiration dates in general terms. For example, for units that have been through major NSR, the initial title V permit might state that the expiration date is the

earlier of the date 10 years after either the Clean Unit's effective date, or the date the equipment went into service. The permit does not have to include the specific Clean Unit effective and expiration dates where they cannot be determined at the time of initial incorporation, such as would be the case when the Clean Unit has yet to be constructed. Furthermore, in these instances, the title V permit need not be modified to incorporate the specific Clean Unit effective and expiration dates until the next permit renewal, reopening, or modification once these dates are known.

The source must report the specific Clean Unit effective and expiration dates to the department as soon as they are known. The specific effective and expiration dates must then be incorporated into the title V permit at the first opportunity (modification, revision, reopening, or renewal), but in no case later than the next renewal. It is not necessary to amend the SIP-approved permit to incorporate the specific Clean Unit effective and expiration dates, as long as these dates are incorporated into the title V permit at the next renewal. If the source wishes to incorporate the Clean Unit effective and expiration dates into the SIP permit, a title V modification would be required.

While the title V permit contains the Clean Unit permit terms and conditions, any changes to Clean Unit permit terms and conditions (other than incorporating the specific Clean Unit effective and expiration dates) must first be made through a SIP-approved permitting process that provides for public comment. Any such changes would be incorporated into the title V permit.

Netting analyses.

Generally, if an emissions unit has Clean Unit status because it has gone through major NSR permitting, the source cannot include emissions changes at the Clean Unit in a netting analysis or use them for generating offsets, unless the emissions changes occur and are used for these purposes before the effective date of Clean Unit status or after Clean Unit status expires. However, if emissions from the Clean Unit are reduced below the level that qualified the unit as a Clean Unit, the source may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the new emission limitation. Such reductions must be surplus, quantifiable, permanent, and federally enforceable (for the purposes of generating offsets) and enforceable as a practical matter (for purposes of determining creditable net emissions increases and decreases). These credits may also be used for netting or as offsets.

The rules are similar for emissions units that are designated as Clean Units in a SIP-approved permitting process other than major NSR. Emissions changes that occur at such units cannot be included in a netting analysis or be used for generating offsets, unless the emissions changes occur and they can be used for these purposes before the effective date of the SIP requirements adopted to implement the Clean Units or after Clean Unit status expires. However, if emissions from the Clean Unit are reduced to below the level that qualified the unit as a Clean Unit, credit for the difference between the level that qualified the unit as a Clean Unit and the new emission limitation may be generated. Again, these reductions must be surplus, quantifiable, permanent, and federally enforceable (for purposes of generating offsets) and enforceable as a practical

matter (for purposes of determining creditable net emissions increases and decreases). Such credits may be used for netting or as offsets.

Multiple pollutants.

Clean Unit status is pollutant-specific and may not be granted for more than one pollutant, except in cases where a group of pollutants is characterized as a single pollutant, such as VOCs. However, a source may qualify for simultaneous Clean Unit status for other pollutants at those emissions units that are sufficiently controlled to independently qualify as "clean" for each pollutant. For units applying for Clean Unit status and that do not already have a major NSR permit, the department must specify the pollutants for which Clean Unit status applies as part of the permitting process establishing Clean Unit status.